

CLIMATOLOGICAL DATA FOR JUNE, 1912.

DISTRICT No. 8, TEXAS AND RIO GRANDE VALLEY.

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GENERAL SUMMARY.

The weather during June was cool and generally wet, with about the normal amount of sunshine. The mean temperature was, with one exception, the lowest of record for June since 1888. The extremes of temperature were well marked, hot days from the 13th to 17th being followed by exceptionally cool nights on the 18th, 19th, and 20th, when frosts occurred at some of the mountain stations and more or less damaged fruit and tender vegetation. The precipitation was favorably distributed both as to time and place over the greater portion of the district. While vegetation had begun to suffer from lack of moisture toward the middle of the month, heavy general rains on the 17th-19th broke the drought in nearly all localities and were of inestimable value to the corn and cotton crops in Texas. The total monthly precipitation was well above the normal in Colorado, the northern two-thirds of New Mexico, and in south Texas, and somewhat deficient in southern New Mexico and in portions of west Texas. Thunderstorms occurred with less than the usual frequency and there were few severe local storms. The average number of days with 0.01 inch or more of precipitation was 9 in Colorado, 8 in New Mexico, and 5 in Texas.

Snow occurred at some of the northern mountain stations, the heaviest amount being 4 inches at Hermit, Colo.

The greatest and least monthly amounts of precipitation were: In Colorado, 2.70 inches at San Luis and 1.44 inches at Manassa; in New Mexico, 5.10 inches at Capitan, and 0.12 inch at Agricultural College; and in Texas, 12.78 inches at Brownsville, and a trace only at Grand Falls, while there was no precipitation at Barstow. Amounts of 2.50 inches or more in 24 consecutive hours occurred at 42 stations in Texas, the heaviest being 6.75 inches at Sabinal on the 17th-18th.

TEMPERATURE.

The mean temperature was 1° below the normal in Colorado, 2.2° below in New Mexico, and 2.7° below in Texas. From the 13th to 18th the day temperatures were above 100° at many interior stations, while the coldest weather of the month occurred during the week beginning with the 18th. The average daily range of temperature varied from about 10° on the Texas coast to about 42° in the middle Rio Pecos Valley.

The highest and lowest temperatures reported were: In Colorado, 88° at San Luis on the 4th, and 20° at Hermit on the 18th; in New Mexico, 103° at Artesia on the 3d, and 30° at 4 stations on several dates; and in Texas, 111° at Ballinger on the 14th and at Seymour on the 15th, and 40° at Claytonville on the 19th. The local monthly means ranged from 45.7° to 58.4° in Colorado, from 50.8° to 78.0° in New Mexico, and from 71.6° to 82.4° in Texas.

PRECIPITATION.

The rainfall was abundant throughout the Rio Grande watershed, except over a short stretch north of El Paso, Tex. The excess was most marked from Del Rio, Tex., to the Gulf, where the monthly amounts ranged from 4 to nearly 13 inches. The average rainfall for the watershed was 2.33 inches, which is over double the normal amount.

The Rio Pecos watershed also received abundant moisture, except over the Texas portion, which showed a marked deficiency, two stations in this section receiving less than 0.01 inch of precipitation. The average for the entire drainage basin, however, was 2.24 inches, which is 0.86 inch greater than the normal.

The average precipitation for the Texas watersheds from the Sabine southwestward to the Lavaca was slightly less than the normal amount, the deficiency ranging from 0.10 inch for the Colorado drainage basin to 0.62 inch for that of the Brazos. Heavy local rains occurred as a rule over these watersheds and the monthly amounts varied greatly, even in nearby localities, but in general the precipitation was heaviest over a broad belt extending from the headwaters of the Trinity southward through the central portion of the State. The coastal plains and the watersheds in the southwestern portion of Texas had heavy precipitation with excesses ranging from 0.51 inch for the Guadalupe drainage basin to 3.31 inches for that of the Nueces. The following are the monthly amounts in inches for the various watersheds: Nueces, 5.86; San Antonio, 3.59; Guadalupe, 4.34; Lavaca, 3.06; Colorado, 2.55; Brazos, 2.73; Trinity, 3.82; Neches, 4.24; Sabine, 3.63; and coastal plains, 6.05.

RIVER CONDITIONS.

The Rio Grande and Rio Pecos were well above low-water mark in their upper and middle portions throughout the month, while heavy rains over the lower portion of the Rio Grande caused this stream to become bank full from Rio Grande City, Tex., southward to the Gulf between the 18th and 23d. Much of the high water came in from the San Juan, which empties into the Rio Grande on the Mexican side just above Rio Grande City, Tex. Very little damage resulted from the high water in the lower portion of this stream, but considerable damage was caused by the high water in the New Mexico portion, washing away several bridges and injuring buildings and other property in the lowlands.

The Texas streams carried less than the normal amount of water, except the Trinity and Nueces. Sharp rises occurred in the upper portions of the Trinity on the 19th and 20th from the heavy rains of the 17th-18th, and the stream remained well above low-water mark in its upper and middle portions to the close of the month.

